

Exhibit 4

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

HEADWATER RESEARCH LLC,

Plaintiff,

vs.

T-MOBILE USA, INC., AND SPRINT CORP.,

Defendants.

Civil Action No. 2:23-cv-00379-JRG-RSP
(Lead Case)

JURY TRIAL DEMANDED

HEADWATER RESEARCH LLC,

Plaintiff,

vs.

T-MOBILE USA, INC., AND SPRINT CORP.,

Defendants.

Civil Action No. 2:23-cv-00377-JRG-RSP
(Member Case)

JURY TRIAL DEMANDED

**PLAINTIFF HEADWATER RESEARCH LLC'S
FIRST SET OF INTERROGATORIES TO DEFENDANTS
T-MOBILE USA, INC. AND SPRINT CORP.**

Pursuant to Rules 26 and 33 of the Federal Rules of Civil Procedure, Plaintiff Headwater Research LLC ("Headwater" or "Plaintiff"), serves this First Set of Interrogatories on Defendants T-Mobile USA, Inc. and Sprint Corp. (collectively, "Defendants" or "T-Mobile"), as follows:

INSTRUCTIONS

1. If you claim that any information requested is privileged, please provide all information falling within the scope of the Interrogatory which is not privileged, and identify with sufficient particularity for purposes of a motion to compel a response all information with respect to which you claim a privilege, and state the basis on which the privilege is claimed.

2. Your responses to the following Interrogatories are to be promptly supplemented to include subsequently acquired information in accordance with the requirements of Rule 26(e) of the Federal Rules of Civil Procedure.

3. All requests contained in the following Interrogatories to identify a document or thing are to be answered by providing a complete and accurate description sufficient for a request for production of documents and things and for a motion to compel the production of documents and things, based only upon the description provided, including giving the following information concerning the same:

- a. The title or brief description of the document or thing;
- b. A brief description of the subject matter, if a document;
- c. The date on which the document or thing was first prepared or received;
- d. Identification of the person who prepared the document or thing;
- e. Identification of the person or persons who received the document or thing;
- f. Identification of the person or persons who presently have custody of the document or thing;
- g. In case of correspondence, the individuals who are the addresser and the addressee; and
- h. If a publication, the title, date of publication, author, specific page numbers and the publisher.

4. All requests contained in the following Interrogatories to identify a person, whether a natural person or organization, are to be answered by providing sufficient information to enable the undersigned to contact the person by telephone and by mail and to serve legal documents on such person, including that person's full name, title (if any), address and telephone number.

5. Whenever you are asked to describe an event or a chain of events, please: (a) state the date or dates of each occurrence relevant to the event; (b) identify all individuals having knowledge of any occurrence or aspect of the event, including but not limited to those involved in witnessing, supervising, controlling, supporting, requesting, or otherwise participating in the event; (c) describe the role and contribution of each person identified; (d) describe all related events and all previous or subsequent related attempts whether or not completed and whether or not successful; and (e) describe the motivation and causation for the event.

6. With respect to any Interrogatory that calls for the identification of a document to which you claim a privilege or other protection attaches, provide a statement, signed by one of your attorneys, setting forth as to each such document:

- a. The name(s) of the sender(s) of the document;
- b. The name(s) of the author(s) of the document;
- c. The name(s) of the person(s) to whom the original or copies were sent;
- d. The date of the document;
- e. The date on which the document was received by those having possession of the document;
- f. The statute, rule or decision that is claimed to give rise to the privilege or other protections; and
- g. A summary of the contents of the document without disclosing the matter that you claim is privileged or otherwise protected.

7. For each objection, state:

- a. The basis for the objection;
- b. Facts supporting the assertion of the objection; and

c. The statute, rule or decision that is claimed to give rise to the objection.

8. These Interrogatories shall be deemed continuing in accordance with Rule 26(e) of the Federal Rules of Civil Procedure.

DEFINITIONS

1. The term “document” includes “originals” and “duplicates” and has the same meaning as the term “writings and recordings” and “photographs” as defined in Rules 1001(1) and (2) of the Federal Rules of Evidence, whether or not claimed to be privileged against discovery on any ground, and specifically including, but not limited to, correspondence, agreements, and communications; dealer-customer, inter-company and intra-company communications; studies, surveys, reports, analyses or projections; announcements, declarations, notices, releases and publicity; telegrams; notes and memoranda; summaries; minutes and records of telephone conversations, meetings and conferences including lists of persons attending meetings or conferences; summaries and records of personal conversations or interviews; financial records including bills, receipts, ledgers, invoices, bank statements and canceled checks; books, manuals, and publications; telexes or cables prepared, drafted, received or sent; calendars or diaries; charts, plans, sketches and drawings; photographs, reports, and/or summaries of investigations and/or surveys; opinions, notes and reports of consultants; opinions of counsel; reports and summaries of negotiations; any other reports or summaries; agreements, contracts, memoranda of understanding, letters of intent, licenses and assignments; brochures, pamphlets, catalogs, catalog sheets, advertisements (including promotional materials), fliers, announcements, posters, signs, story boards, and scripts, audio and video recordings of radio and television commercials; circulars and trade letters; information contained in any medium now known or hereafter devised including without limitation information contained on computer tape, card, disc or program or information

taking the form of or implemented as computer code or source code; and any other paper, writing or physical thing which contains the requested information. Any document that contains any comment, notation, addition, deletion, insertion or marking of any kind, which is not part of another document, is a separate document.

2. The terms “original” and “duplicate” are defined in Rules 1001(3) and (4) of the Federal Rules of Evidence, as follows: “Original” means the writing itself or any counterpart intended to have the same effect by a person executing or issuing it. An “original” of a photograph includes the negative or any print therefrom. If data is stored in a computer or similar device, any printout or other output readable by sight, shown to reflect the data accurately, is an “original.” A “duplicate” is a counterpart produced by the same impression as the original, or from the same matrix, or by means of photographs, including enlargements and miniatures, or by mechanical or electronic re-recording, or by chemical reproduction, or by other equivalent techniques, that accurately reproduces the original.

3. The term “correspondence” refers to and includes each and every communication, letter, copy of a letter, telegram, e-mail, text message, record or notation, or any conversation, inter-office memorandum or any other similar writing.

4. The terms “relate,” “relates to,” “related to” or “relating to” shall mean all documents and things having any logical or factual connection, directly or indirectly, with the matter discussed and shall mean any one or more of the following: evidencing, referring to, discussing, describing, concerning, mentioning, reflecting, depicting, summarizing, involving, regarding, embodying, containing, pertaining to, arising out of or is in connection with.

5. The term “evidence” means testimony, writings, material objects, or other things presented to the senses that could be offered to prove the existence or nonexistence of a fact.

6. The term “Defendant(s)” means collectively all persons and/or entities named as defendants in the above-captioned matters, including (i) all of their current and past officers, directors, agents, employees, consultants, attorneys, and others acting or purporting to act on behalf of them, and (ii) all of their predecessors, subsidiaries, parents, affiliates, and successors.

7. The terms “you” and “your” mean the responding party, including any of its present and former agents, officers, directors, employees, affiliates, investigators, trustees, consultants, advisors, accountants, attorneys and all other persons or entities acting or purporting to act on its behalf or on behalf of its predecessors, subsidiaries, parents, affiliates and successors.

8. The term “T-Mobile” means T-Mobile USA, Inc., and Sprint Corp., and their officers, executives, employees, agents, attorneys, representatives, shareholders, predecessors-in-interest, independent contractors, or other persons acting or purporting to act on their behalf.

9. The terms “Plaintiff” and “Headwater” mean Headwater Research LLC and its officers, executives, employees, agents, attorneys, representatives, shareholders, predecessors-in-interest, independent contractors, or other persons acting or purporting to act on their behalf.

10. The term “ItsOn” means ItsOn Inc. and its officers, executives, employees, agents, attorneys, representatives, shareholders, predecessors-in-interest, independent contractors, or other persons acting or purporting to act on their behalf.

11. The term “ItsOn software” means any application, computer code, source code, software, software instructions, or software policies created, authored, developed, demonstrated, provided, supplied, or furnished by ItsOn.

12. The terms “person” or “persons” mean and include natural persons, corporations, companies, limited liability companies, partnerships, limited partnerships, associations,

organizations, joint ventures, groups, government bodies or agencies, legal entities or any other cognizable entities.

13. The term “communication” means any oral or written transmission of information between persons, including but not limited to, meetings, discussion, conversations, telephone calls, memoranda, letters, telecopies, telexes, conferences or seminars.

14. The term “Asserted Patents” or “Patent(s)-in-Suit” means U.S. Patent Nos. 8,589,541 (“the ’541 patent”), 8,924,543 (“the ’543 patent”), 9,198,042 (“the ’042 patent”), and 9,215,613 (“the ’613 patent”). The related applications for each respective Asserted Patent are included in the definition of “Asserted Patents.” The term “Patent(s)-in-Suit” may be used interchangeably with the term “Asserted Patents” and those terms shall have the same meaning. The following non-limiting descriptions of the patent applications for the Asserted Patents are provided to aid you in identifying discoverable information and do not in any way constitute a representation of fact, limit your discovery obligations or define or identify the full extent of those applications included within the definition of the term “Asserted Patents”:

- a. The ’541 Patent was filed on May 25, 2011, as U.S. Patent Application Ser. No. 13/134,028.
- b. The ’543 Patent was filed on September 28, 2011, as U.S. Patent Application Ser. No. 13/248,025.
- c. The ’042 Patent was filed on January 9, 2013, as U.S. Patent Application Ser. No. 13/737,748.
- d. The ’613 Patent was filed on April 13, 2015, as U.S. Patent Application Ser. No. 14/685,511.

15. The terms “Accused Product(s)” or “Accused Instrumentalities)” each refer to all of your mobile electronic devices, including mobile phones and tablets, including but not limited to those products identified by Plaintiff as those alleged to infringe the Asserted Patents, including those described in the Complaint or identified in Plaintiff’s Infringement Contentions and/or Preliminary Infringement Disclosures pursuant to Patent Local Rule 3-1 (inclusive of any subsequent amendments thereto) served in this case, that you currently make, use, sell, offer for sale, or import, or that you have made, used, sold, offered for sale, or imported, and similar products.

16. When referring to a person, “identify” means give, to the extent known, the person’s full name, present or last known address, and when referring to a natural person, additionally, the present or last known place of employment. Once you identify a person in accordance with this paragraph, only the name of that person need be listed in response to subsequent discovery requesting the identification of that person.

17. When referring to documents, “to identify” means to provide, to the extent known, the: (i) type of document; (ii) general subject matter; (iii) date of the document; (iv) location(s) where documents is stored; and (v) author(s), addressee(s) and recipient(s).

18. The term “concerning” means relating to, referring to, describing, evidencing, or constituting.

19. The terms “all” and “each” when used individually shall be construed as both all and each.

20. The term “including” means “including but not limited to.”

21. The term “affiliate” means any corporation or entity related through corporate ownership of stock such as a parent, subsidiary or sister company, or through common directors, officers, and employees, either at the present time or at any time in the past.

22. The term “prior art” shall have the same meaning as the phrase is generally understood in proceeding before the United States Patent and Trademark Office and used in the Manual of Patent Examining Procedure. The term “prior art” includes at least the subject matter described in 35 U.S.C. §§ 102 and 103 and includes publications, patents, physical devices, products, prototypes, uses, sales, offers for sale, and any documents evidencing the foregoing.

23. The terms “foreign patent” and “foreign patent application” include foreign patents and patent applications filed in countries outside the United States, and include, but are not limited to, divisions, continuations, continuations-in-part, appeals, reissues, patents-of-improvement, inventor’s certificates, and foreign utility models.

24. The term “related application” means any application, filed anywhere in the world, that: (a) is a parent, child, or other ancestral application related in any way to a given patent; (b) is a continuation application, continuation-in-part application, divisional application, file-wrapper continuation, reexamination proceeding, reissue application, provisional application, or abandoned application of such patent or the application that led to such patent; (c) claims priority in whole or in part from such patent or the application that led to such patent; (d) is the basis for a claim of priority in whole or in part (including claims of benefits under 35 U.S.C. §§ 119(e) or 120) for a given patent; or (e) shares subject matter with a given patent.

25. The term “related patent” means any patent that issued from any related application.

26. The term “system(s)” refers to all hardware and/or software necessary to perform a function, including the hardware and/or software for all components, modules, subsystems, and related systems thereof.

27. The term “products” refers to, without limitation, all products, devices, components, interfaces, systems, modules, tools, methods, functionalities, processes, and/or services (including software) that are or were under development or planned to be developed.

INTERROGATORIES

INTERROGATORY NO. 1:

Set forth all factual bases for, including identification of any documents or witnesses that you contend support, the Affirmative Defenses asserted in your Answer.

INTERROGATORY NO. 2:

Describe in detail your awareness of the Asserted Patents, including when you first became aware of the Asserted Patents and any actions you have taken as a result of your awareness of the Asserted Patents.

INTERROGATORY NO. 3:

Describe in detail your awareness of ItsOn, ItsOn software, Headwater, and/or any inventor of the Asserted Patents, including when you first became aware of ItsOn, ItsOn software, Headwater, and/or any inventor of the Asserted Patents and the interactions you had with ItsOn, Headwater, and/or any inventor of the Asserted Patents, including identifying by Bates number all documents that refer or relate to your awareness of and interactions with ItsOn, ItsOn software, Headwater, and/or any inventor of the Asserted Patents.

INTERROGATORY NO. 4:

the Bates numbers of all such documents, and all persons that possess related knowledge about these documents, studies, surveys or other reports or analyses.

INTERROGATORY NO. 17:

Describe and identify any planned, potential, alleged, or implemented design-around or non-infringing alternative of any claim of the Asserted Patents, including any documents evidencing any such potential design-around or non-infringing alternative to the Accused Products, including any analysis of commercial and consumer acceptability (or lack thereof), availability, cost of implementation, time for implementation, implementation business impacts, and design of any such purported noninfringing alternative or design-around.

INTERROGATORY NO. 18:

Describe in detail the facts and circumstances related to T-Mobile's (including Sprint's) work with ItsOn and work with Samsung entities relating to ItsOn in or around 2010-2016 (*see, e.g., -379 Complaint ¶¶ 16-27*), including any reports or analyses regarding ItsOn technology, decisions to implement, replace, or not implement ItsOn technology, evaluations or discussions of any Headwater patents, the number of devices operating on Sprint networks annually that ran any version of the ItsOn application, and the three persons at T-Mobile most knowledgeable about the foregoing.

INTERROGATORY NO. 19:

Describe in detail the facts and circumstances related to Samsung's decision in or around October 2015 to implement any Headwater/ItsOn technology in Samsung's own device software without further involvement from ItsOn and T-Mobile's (including Sprint's) decision in or around October 2015 to terminate the Sprint/ItsOn MSA (*see, e.g., -379 Complaint ¶¶ 30-39*), including T-Mobile's communications with Samsung regarding the foregoing, the reasons for T-Mobile's

decision to terminate the Sprint/ItsOn MSA, any formal or informal agreement between T-Mobile and Samsung relating to the implementation of any Headwater/ItsOn technology or any roaming control policy, and the three persons at T-Mobile most knowledgeable about the foregoing.

Dated: January 19, 2024

Respectfully submitted,

/s/ Marc Fenster

Marc Fenster

CA State Bar No. 181067

Email: mfenster@raklaw.com

Reza Mirzaie

CA State Bar No. 246953

Email: rmirzaie@raklaw.com

Brian Ledahl

CA State Bar No. 186579

Email: bledahl@raklaw.com

Ben Wang

CA State Bar No. 228712

Email: bwang@raklaw.com

Paul Kroeger

CA State Bar No. 229074

Email: pkroeger@raklaw.com

Neil A. Rubin

CA State Bar No. 250761

Email: nrubin@raklaw.com

Kristopher Davis

CA State Bar No. 329627

Email: kdavis@raklaw.com

James S. Tsuei

CA State Bar No. 285530

Email: jtsuei@raklaw.com

Philip Wang

CA State Bar No. 262239

Email: pwang@raklaw.com

Amy Hayden

CA State Bar No. 287026

Email: ahayden@raklaw.com

James Milkey

CA State Bar No. 281283

Email: jmilkey@raklaw.com

Jason M. Wietholter

CA State Bar No. 337139

Email: jwietholter@raklaw.com

RUSS AUGUST & KABAT

12424 Wilshire Blvd. 12th Floor

Los Angeles, CA 90025

Telephone: 310-826-7474

**ATTORNEYS FOR PLAINTIFF,
Headwater Research LLC**

CERTIFICATE OF SERVICE

The undersigned certifies that on January 19, 2024, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via electronic mail.

/s/ Marc Fenster
Marc Fenster